

OBJECTIVES: The aim of our study was to analyze the clinical pathway of the patients with breast tumor, who were screened by the mammographic breast screening program. **METHODS:** The data derive from the database of the National Health Insurance Fund Administration. The patients include all the women having “42400 mammography screening” code in the year of 2008. We followed these patients’ first appearances in the health care system. Diagnostic delay was called as the time difference between the date of the screening and the date of the first appearance in the outpatient care system, the treatment delay called as the time difference between the date of screening and the date of first appearance in the inpatient care system. **RESULTS:** In 2008, 232,321 women participated in the organized mammography breast screening program in 44 institutions. The median value of the diagnostic delay was 47 days. Within diagnostic delay, there was a 30 days delay of definitive pathological diagnosis. Based upon the DRG codes the median value of the treatment delay was 70.75 days for surgical interventions and 191.75 days for radiotherapy. In comparison with the 2002 year data we found that the diagnostic delay was usually decreased with 10–20 days, while the median value of the treatment delays was increased on the average of 26–30 days. In 2012 the same delays were about twice longer. **CONCLUSIONS:** In comparison with the dates described by the international literature our national health care system works 1.5–2 times longer delays. The examination of the patients’ clinical pathways may allow of determining diagnostic and treatment delays of health care system. It would be necessary to optimize and reduce the clinical pathways with the participation of the all the professionals involving oncologic patients’ clinical pathway, and to determine the expected and achieved standard values.

PMD12

TELEMEDICINE CONSULTATION IN THE DIFFERENTIAL DIAGNOSIS SIMPLE CONTACT DERMATITIS DUE TO INCONTINENCE AND PRESSURE SORES IN IMMOBILIZED PATIENTS WITH URINARY INCONTINENCE - CLINICAL AND ECONOMIC ANALYSIS

Vorobiev A, Vorobiev P, Krasnova L

Russian Society for Pharmacoeconomics and Outcomes Research, Moscow, Russia

OBJECTIVES: In the differential diagnosis of a simple contact dermatitis (CD) and pressure ulcers (PU) in patients with urinary and fixed holds a special place visual assessment of skin. However, not all possess this skill, and telemedicine consultations are considered expensive. **METHODS:** The researcher evaluated the patient’s skin by questionnaire, and then spent photographic images of the skin in the standard points. Expert remotely evaluated the skin by photographs and then the diagnoses were compared. Calculated the cost of the methodology. **RESULTS:** The expert noted no changes of the skin in 459 (86.3%) points at the bedside only 383 (72%) points. According to the expert diagnosis was made in 29 (5.5%) points, 1–2 tbsp. PU is set to 39 (7.3%) points 3–4 art. P - 5 (0.9%) points. Immediately patient diagnosed CD 53 set (10%) points 1–2 tbsp. PU - 88 (16.5%) points 3–4 tablespoons. PU - 8 (1.5%) points. Expert significantly less often seen in photographs erythema, cracks and peeling. According to the results of teleconsultation diagnosis pressure ulcers raised 2 times less frequently than directly from the patient. Almost 2 times less expert described contact dermatitis. The number of mismatches conclusions severe pressure ulcers with other changes of the skin is relatively low and difficult to interpret. The total costs of teleconsultation was 5 \$ for 1 patient. **CONCLUSIONS:** The use of teleconsultation allows for a relatively low cost to refine the differential diagnosis of CD and PU, which optimizes tactics of conducting patients, reduces the overall cost of patients.

PMD13

MEASURING POST-PARTUM HEMORRHAGE IN LOW-RESOURCE SETTINGS: THE DIAGNOSTIC VALIDITY OF WEIGHTED BLOOD LOSS VERSUS QUANTITATIVE CHANGES IN HEMOGLOBIN

Atukunda EC¹, Mugenyi GR¹, Obua C¹, Atuhumuza EB¹, Musinguzi N¹, Tornes YF¹, Agaba AG¹, Siedner MJ²

¹Mbarara University of Science and Technology, Mbarara, Uganda, ²Harvard Medical School, Boston, MA, USA

OBJECTIVES: Accurate estimation of blood loss is central to prompt diagnosis and management of post-partum hemorrhage (PPH), which remains a leading cause of maternal mortality in low-resource countries. In such settings, blood loss is often estimated visually and subjectively by attending health workers, due to inconsistent availability of laboratory infrastructure. We evaluated the diagnostic accuracy of weighed blood loss (WBL) versus changes in peri-partum hemoglobin to detect PPH. **METHODS:** Data from this analysis were collected as part of a randomized controlled trial comparing oxytocin with misoprostol for PPH (NCT01866241). Two blood samples for complete blood count were drawn on admission and prior to hospital discharge or before blood transfusion. After delivery, blood was drained into a calibrated measuring jar and the subsequent weight differences of pre-weighed sanitary towels added to estimate WBL (1g=1mL). Sensitivity, specificity, negative and positive predictive values (PPVs) were calculated and receiver-operator curves fitted. **RESULTS:** A total of 1,140 women were enrolled in the study, of whom 258 (22.6%) developed PPH, defined as a hemoglobin drop > 10%, and 23.0% had WBL ≥ 500mL. WBL generally had a poor sensitivity for detection of PPH (< 75% for most volume-time combinations). In contrast, the specificity of the WBL was high with blood loss ≥ 500mL at 1h and ≥ 750mL at all-time points excluding PPH in over 97% of women. As such, WBL has promise as a diagnostic technique to identify PPH in higher-prevalence settings, where the high specificity corresponds to a high PPV (> 85%) when WBL exceeds 750mL. **CONCLUSIONS:** WBL has poor sensitivity but high specificity for PPH versus laboratory-based methods of hemorrhage detection. These characteristics correspond to a high PPV in areas with high PPH prevalence. Although WBL is not useful for excluding PPH, this low-cost, simple and reproducible method seems promising as a reasonable alternative method to “rule-in” significant PPH in such settings where quantifiable red cell indices are unavailable.

PMD14

THE SAFETY AND TOLERABILITY OF THE FENTANYL IONTOPHORETIC TRANSDERMAL SYSTEM COMPARED TO OTHER POST-OPERATIVE PAIN MODALITIES: A SYSTEMATIC REVIEW AND BAYESIAN NETWORK META-ANALYSIS (NMA)

Tongbram V¹, Ogden K², Ndirangu K¹, Urs S³, Overbaugh R⁴, Danesi H⁵, Abraham J⁶

¹ICON Plc, Morristown, NJ, USA, ²ICON, San Francisco, CA, USA, ³ICON, Morristown, NJ, USA,

⁴ICON Development Solutions, San Antonio, TX, USA, ⁵The Medicines Company, Parsippany, NJ, USA, ⁶The Medicines Company, Waltham, MA, USA

OBJECTIVES: Fentanyl iontophoretic transdermal system (ITS) is the first needle-free, pre-programmed transdermal delivery system for patient-controlled analgesia (PCA) and management of acute post-operative pain (POP) in adult patients. Clinical practice requires comparisons to POP treatments in current practice such as epidurals, multimodal regimens (nerve blocks and intravenous opioids), long acting analgesics, or intravenous PCA. This analysis compared the clinical safety and tolerability of fentanyl ITS relative to current POP strategies used following major hip and knee orthopedic surgeries. **METHODS:** A systematic literature review was conducted to identify all RCTs of fentanyl ITS and POP treatments after major hip and knee orthopedic surgeries. Searches in EMBASE, MEDLINE, and the Cochrane Central Register of Controlled Trials from 1990 to August 2014 were conducted; reference lists of included studies and unpublished study reports were searched. The odds-ratios for three safety outcomes, “discontinuation due to adverse events [AEs]”, “pruritus” and “respiratory depression” were estimated using fixed- and random-effects Bayesian Network Meta-Analysis (NMA) models. **RESULTS:** Forty six RCTs were included in the NMA. The fixed-effects model for “discontinuation due to AEs” showed that fentanyl ITS is significantly better than IV PCA morphine (OR 0.35, 95% CrI 0.16, 0.70). In the fixed-effects model for “pruritus”, fentanyl ITS performed significantly better than IV PCA morphine (OR 0.42, 95% CrI 0.22, 0.78) and continuous epidural (OR 0.24, 95% CrI 0.06, 0.93). In the analysis for “respiratory depression”, fentanyl ITS was not statistically significantly different from all other POP treatments. **CONCLUSIONS:** Fentanyl ITS was comparable with other current POP treatments employed to manage POP following major hip and knee surgery, offering a similar clinical safety and tolerability profile to current POP alternatives. Fentanyl ITS may be a suitable complement for multimodal therapeutic approaches or a potential replacement for certain regimens in terms of safety and tolerability.

PMD15

THROMBECTOMY IN THE TREATMENT OF ACUTE ISCHEMIC STROKE: WHAT EFFECTS DO METHODOLOGICAL DIFFERENCES IN TRIAL DESIGN HAVE ON COMPARABILITY OF OUTCOMES?

Krizza C¹, Zhang S², Harrington P³, Nachtnebel A⁴, Mayer J⁴, Wild C⁴, Kolominsky-Rabas P¹

¹Centre for Health Technology Assessment (HTA) and Public Health (IZPH), Friedrich-Alexander-University of Erlangen-Nürnberg; National Leading-Edge Cluster Medical Technologies ‘Medical Valley EMN’, Erlangen, Germany, ²Centre for Health Technology Assessment (HTA) and Public Health (IZPH), Friedrich-Alexander-University of Erlangen-Nürnberg, Erlangen, Germany, ³Health Information and Quality Authority (HIQA), Dublin, Ireland, ⁴Ludwig Boltzmann Institute for Health Technology Assessment, Vienna, Austria

OBJECTIVES: Five recently published RCTs showed positive effects of mechanical thrombectomy for treating acute ischemic stroke patients. The objective of this study is to review the effect of methodological differences in these trials on their comparability and results. **METHODS:** This study critically examines the main characteristics of the five RCTs including trial design, inclusion criteria, intervention methods and related time factors on the assessment of mechanical thrombectomy trial results. **RESULTS:** The multicenter trials MR CLEAN, ESCAPE, EXTEND-IA, SWIFT-PRIME and REVASCAT prospectively randomised patients to standard care (usually thrombolysis) alone or standard care plus mechanical thrombectomy. MR CLEAN was notably the only ‘pragmatic trial’. The number of patients randomised ranged from 70 to 500, with three studies stopping early due to efficacy. Two RCTs used intraarterial treatment where choice of therapy was left to a certain level of interventionists’ discretion, with retrievable stents recommended. Three RCTs focused on thrombectomy with a specific device, the Solitaire FR stent retriever. Inclusion criteria differed in terms of imaging modalities used, thrombus location, and time intervals for treatment ranging between 4.5–12 hours after symptom onset. Further variations concerned process times and measurement. In all studies, the outcome of modified Rankin Scale at 90 days favoured thrombectomy (adjusted odds ratios ranged from 1.67 to 3.1). Higher rates of functional independence in favour of thrombectomy were noted in all RCTs, improvements ranged from 32.6 vs 19% to 71 vs 40%. MR CLEAN exclusively reported the safety variable “new ischemic stroke in a different vascular territory within 90 days” as 5.6 and 0.4% in the thrombectomy and control groups, respectively. **CONCLUSIONS:** The results of five recent RCTs focusing on thrombectomy are highly promising but methodological heterogeneity of these studies affects the comparability of efficacy and safety results. Caution is therefore needed when drawing overall conclusions for HTA reporting.

PMD16

NETWORK META-ANALYSIS ON PREVENTION OF STROKE FOR PATENT FORAMEN OVALE CLOSURE

Aggarwal S¹, Kumar S², Topaloglu H¹

¹NOVEL Health Strategies, Chevy Chase, MD, USA, ²GLOBAL ACCESS Monitor, Bethesda, MD, USA

OBJECTIVES: Strokes are associated with high rates of morbidity and are the global second leading cause of death. Up to 40% of ischaemic strokes are cryptogenic. A network meta-analysis to compare the effectiveness of patent foramen ovale closure in patients with cryptogenic stroke or embolism. **METHODS:** A systematic literature search for randomized clinical trials for patent foramen ovale closure was undertaken for the databases Pubmed, Embase, Biosis, Google Scholar and Cochrane. Data was collected for the study type, methods, country and key findings. Extracted study data included study design, patient characteristics and stroke related outcomes. A Bayesian random effects network meta-analysis model was developed